



al6z

How to Win the Future

An Agenda for the Third Generation
of the Internet

October 2021

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A Crisis in America's Technology Leadership

Staying still means falling behind and failing the American people

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Backing bold entrepreneurs who are building web3 companies and protocols

A Crisis in America's Technology Leadership

Staying still means falling behind and failing
the American people





When the producers of HBO’s “Westworld” wanted to portray the American city of the future, they didn’t film in Seattle or Los Angeles or Austin — they went to Singapore. We should have gleaming skyscrapers and spectacular living environments in all our best cities at levels way beyond what we have now; where are they?

Marc Andreessen



**If the vigilance was dropped,
even for a moment, then the
weight of the battle would shift.**

**We are forced to keep running
merely to keep still.**

Siddhartha Mukherjee

The World Has Two Tech Paradigms; Both Are Flawed

In the long run, digital authoritarianism and big tech are both incompatible with a healthy open society



Digital Authoritarianism



Big Tech

The Corrosion of the Internet

This is not about evil corporations; our incentives and infrastructure are broken



Tuesday's Internet Outage Was Caused
By One Customer Changing A Setting,
Fastly Says



**Right or Left, You Should Be Worried
About Big Tech Censorship**



**Cloudflare CEO says his Daily Stormer
takedown was “arbitrary” and
“dangerous”**

“I woke up this morning in a bad mood and decided to kick them off the Internet.”



The Internet Is Rotting

Too much has been lost already. The glue that holds humanity's
knowledge together is coming undone.

Trust and Faith in Institutions is Declining

Many of the core institutions that power our economy and society are struggling

Dimensions of trust
(Competence score, net ethical score)



Source: [Edelman](#)

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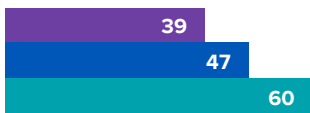
Average Americans are Being Left Out

We must do more to promote equity and opportunity in the digital economy

60% of broadband users with lower incomes often or sometimes have connection problems, and 46% are worried at least some about paying for broadband

% of U.S. home broadband users who say ...

They **often** or **sometimes** experience problems with the speed, reliability or quality their high-speed internet connection in a way that makes it hard to do the things they need to do online



They worry **a lot** or **some** about being able to pay for their high-speed internet connection at home over the next few months



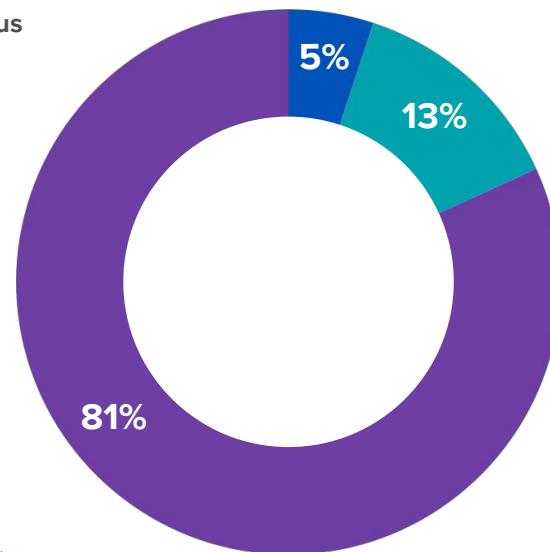
■ Upper Income ■ Middle Income ■ Lower Income

Note: Income tiers are based on adjusted 2019 earnings. Those who did not give an answer or who gave other responses are not shown.

Source: Survey of U.S. adults conducted April 12-18, 2021.

"The Internet and the Pandemic"

Figure 21.
Banking status



■ Fully Banked
■ Unbanked
■ Underbanked

Note: Among all adults.

For Better and Worse, Policymaking Amplifies the Impact of Innovation

1997: The Clinton Administration proposes a set of principles for the internet



The Framework for Global Electronic Commerce

The private sector should lead.

Governments should avoid undue restrictions on electronic commerce.

Where governmental involvement is needed, its aim should be to support and enforce a predictable, minimalist, consistent and simple legal environment for commerce.

Governments should recognize the unique qualities of the Internet.

Electronic Commerce over the Internet should be facilitated on a global basis.

Source: [Clinton White House Archive](#)

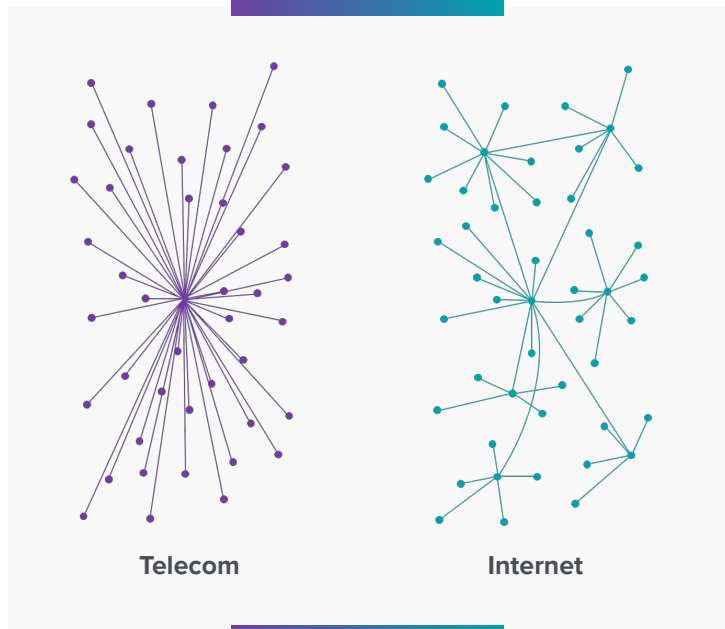
The Promise of a Better Internet

Why policymakers should embrace
the potential of web3

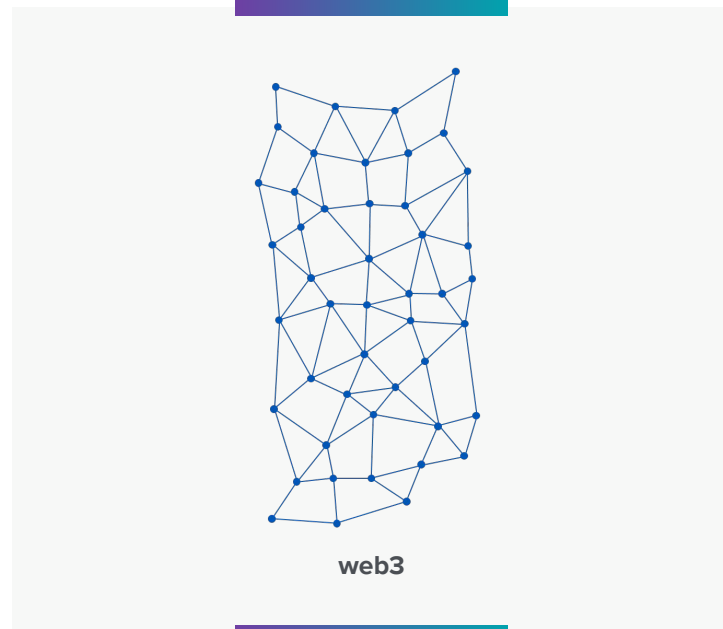


web3 Can Be a Fresh Start

web3 makes systems that are stronger and more equitable



Single points of failure and control



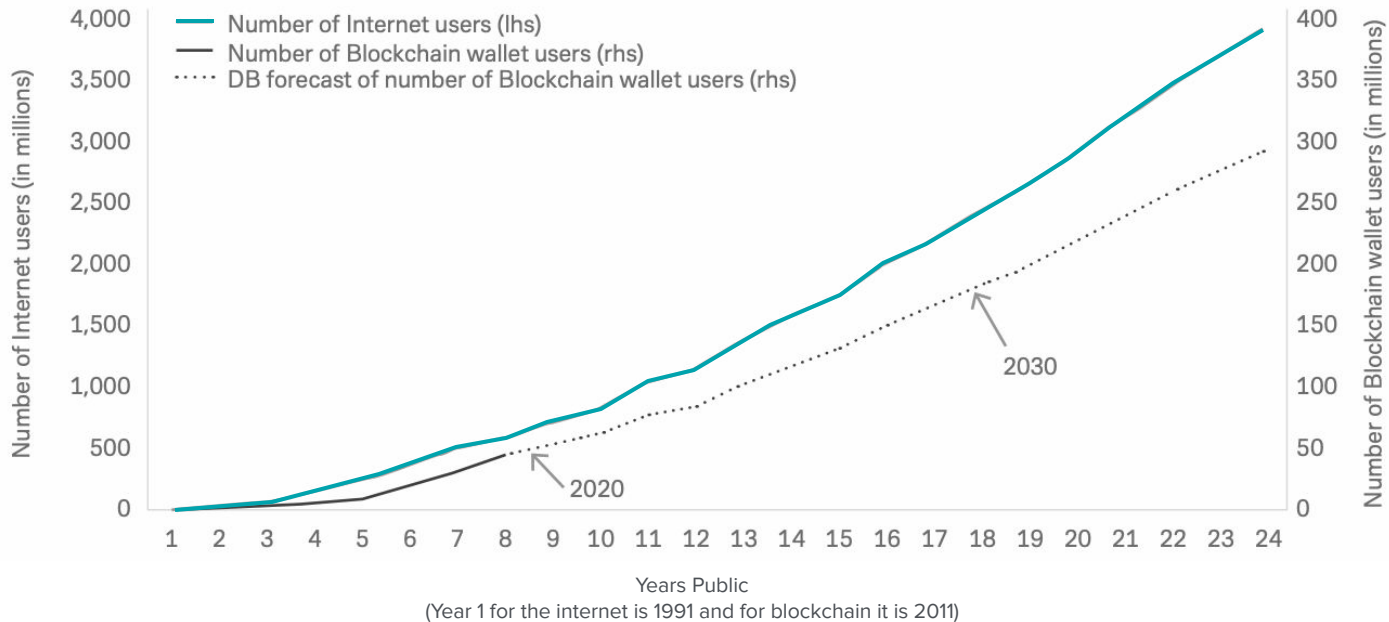
Resilient and participatory

Source: RAND

Now is the Time to Set a Policy Agenda

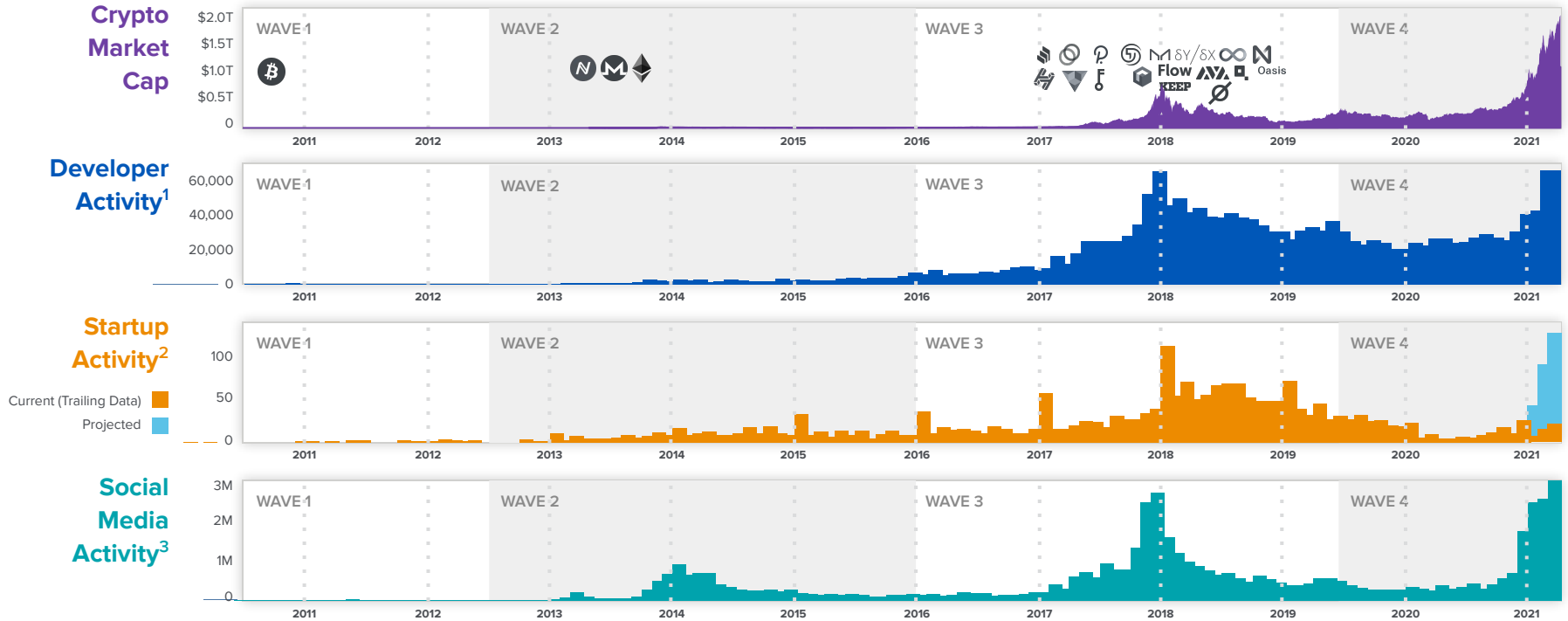
When compared to internet adoption, today is our 1997 moment to set the agenda for how the next 20 years will play out

Adoption rates of cryptocurrencies and the Internet



Now is the Time to Set a Policy Agenda

web3 adoption is escalating rapidly

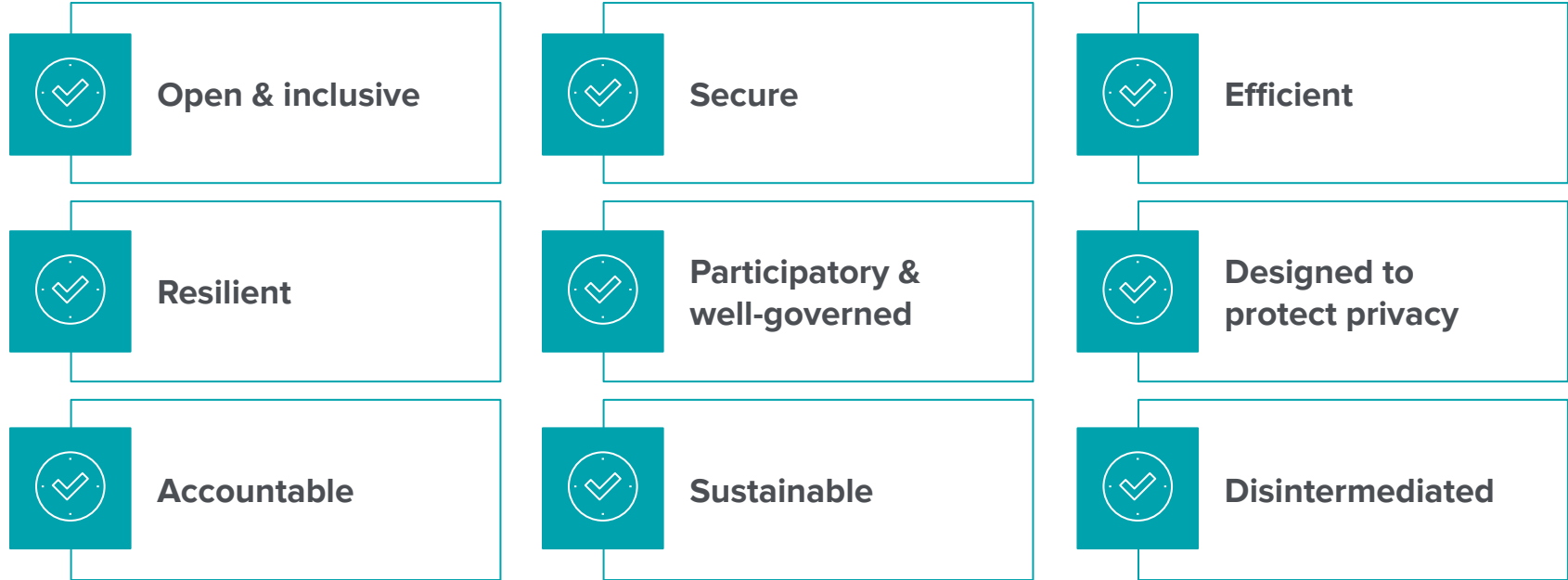


Charts provided herein are for informational purposes only and should not be relied upon when making any investment decision. Past performance is not indicative of future results.

¹ Developer activity based on crypto stars on GitHub. ² Startup activity based on crypto first rounds funding via Pitchbook. ³ Social media activity based on comments on crypto-related subreddits.

What Do We Want From the Next Generation of the Internet?

We can and should establish an affirmative vision for the role of technology in society



How to Win the Future

An agenda for policymakers





Whereas most technologies tend to automate workers on the periphery doing menial tasks, blockchains automate away the center.

Vitalik Buterin

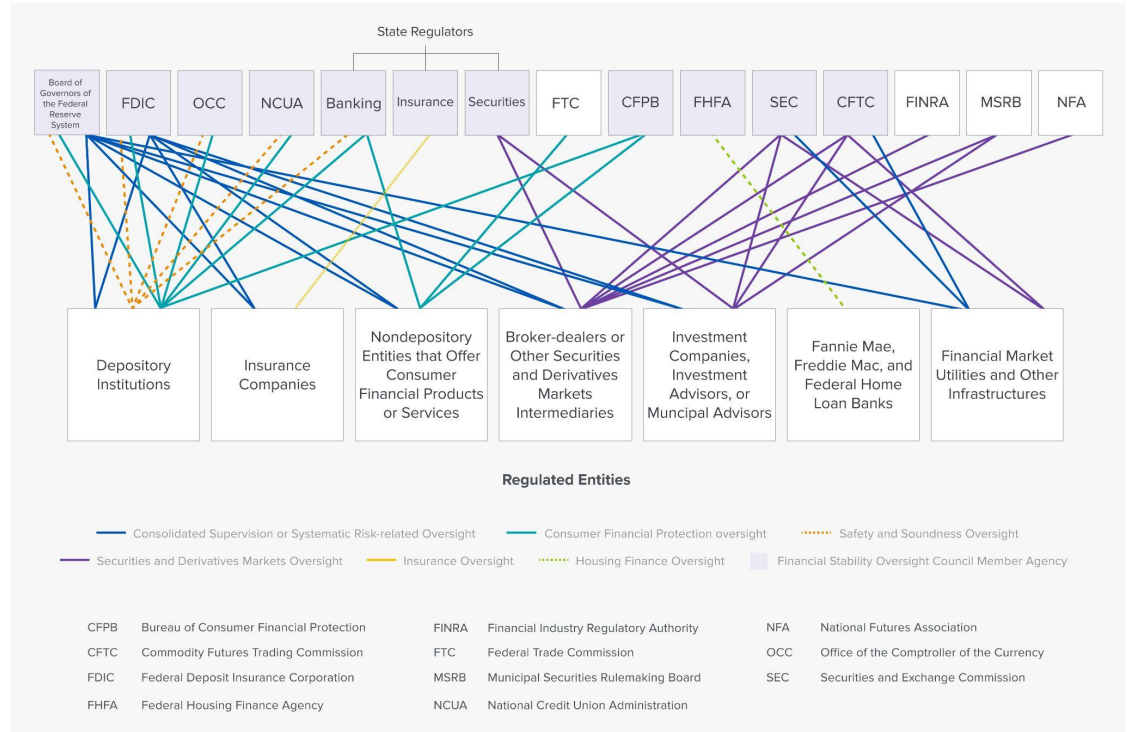
Moving from an Aspirational to Operational Policy Agenda



Moving from an Aspirational to Operational Policy Agenda

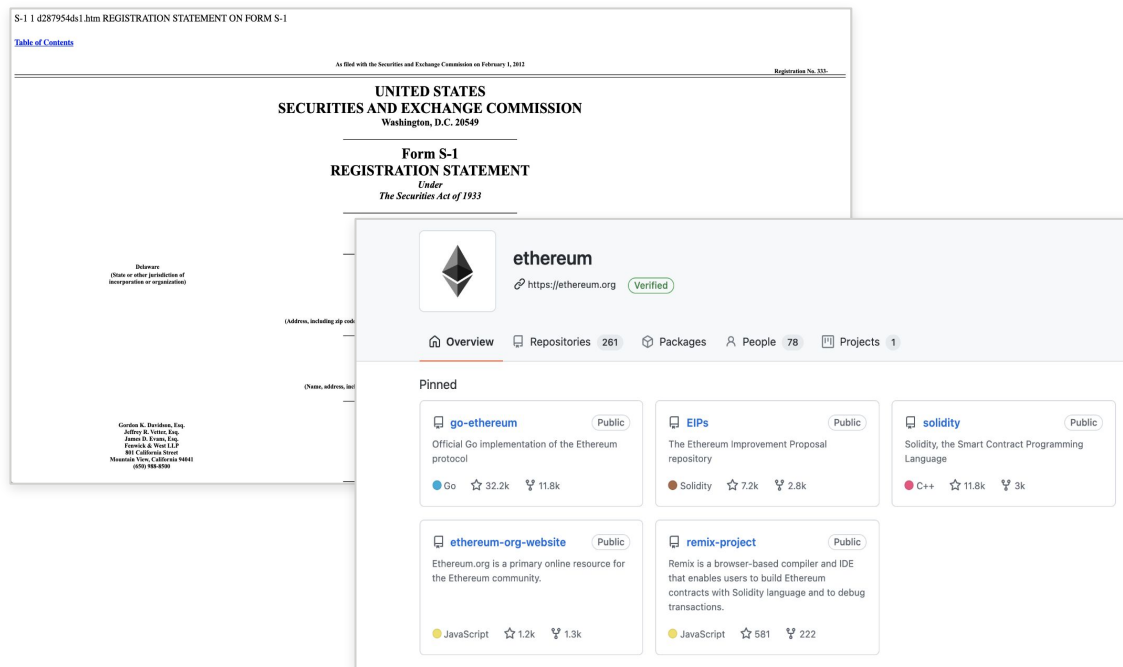
SECURITY Embrace redundancy, small-scale and low-risk experimentation, and privacy-first networks	Pursue jurisdictional harmonization
	Participate in standards-setting for protocols
	Create regulatory sandboxes and safe harbors
INCLUSION Ensure equitable access to resources and information	Embrace a wide array of private sector solutions
	Leverage the strengths of web3 technology
	Bring regulation into the 21st century
EFFICIENCY Promote systems that improve on existing, antiquated infrastructure	Provide clear, fair tax rules
	Unlock the potential of DAOs
	Establish a national strategy for digital infrastructure and align web3 with sustainability objectives

Example #1: Pursue Jurisdictional Harmonization

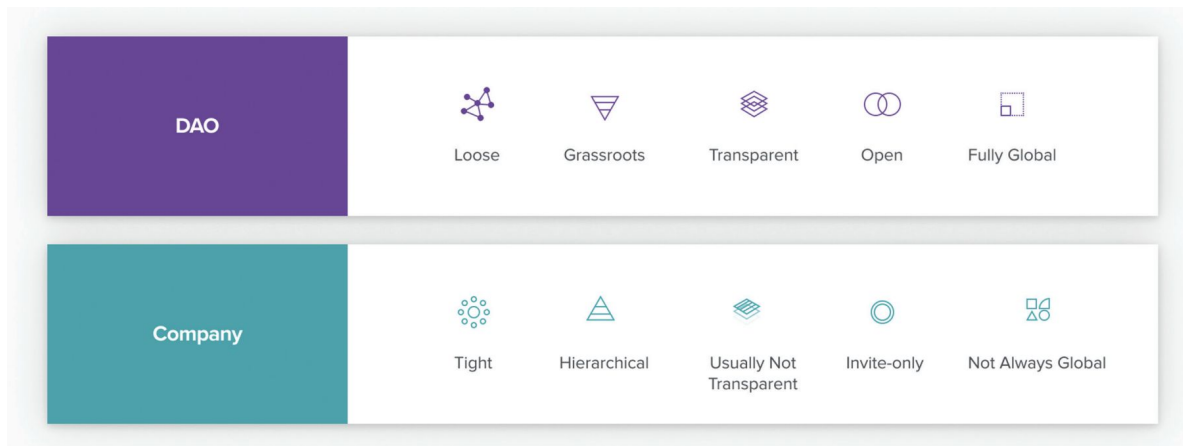


Source: [Government Accountability Office](#)

Example #2: Bring Regulatory Regimes into the 21st Century



Example #3: Unlock the Potential of DAOs



Source: Aragon

Andreessen Horowitz

Backing the bold entrepreneurs building web3



About Andreessen Horowitz (a16z)

We are radically optimistic about the potential of web3 to restore trust and enable new kinds of cooperation and governance. We believe these tools can help communities break through the stalemates that define too many aspects of public life and make collective decisions, including about critical issues such as how networks will evolve, what behaviors are permitted online, and how economic benefits are distributed.

Our team includes former officials drawn from across government. As the largest investor in the space, we know web3 — but we also understand public service. We see the potential of web3 as a force for good, and we are eager to work with policymakers to define a vision for how to use these powerful new tools to benefit society and ensure they realize their full potential.

Who We Are



Katie Haun



Chris Dixon



Ben Horowitz



Ali Yahya



Arianna Simpson



Anthony Albanese



Tomicah Tillemann



Miles Jennings



Jai Ramaswamy



James Rathmell



Bill Hinman



Brian Quintenz

We Invest in the Leading Projects Across the Industry

Blockchains & Scalability



chia



SOLANA

Financial Services



valora



celo

coinbase

eco

Creator Economy & Gaming



OpenSea

Dapper



rally



Infrastructure



arweave



Aleo

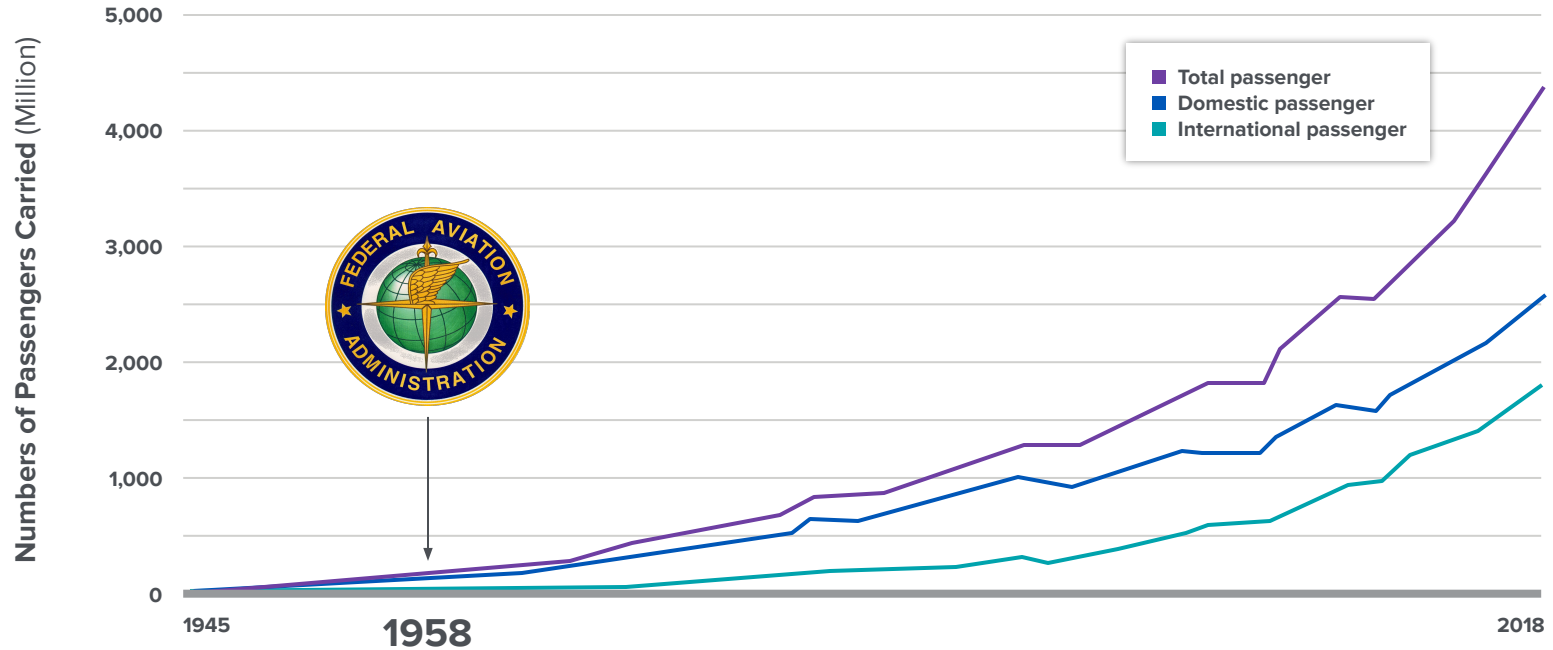


helium



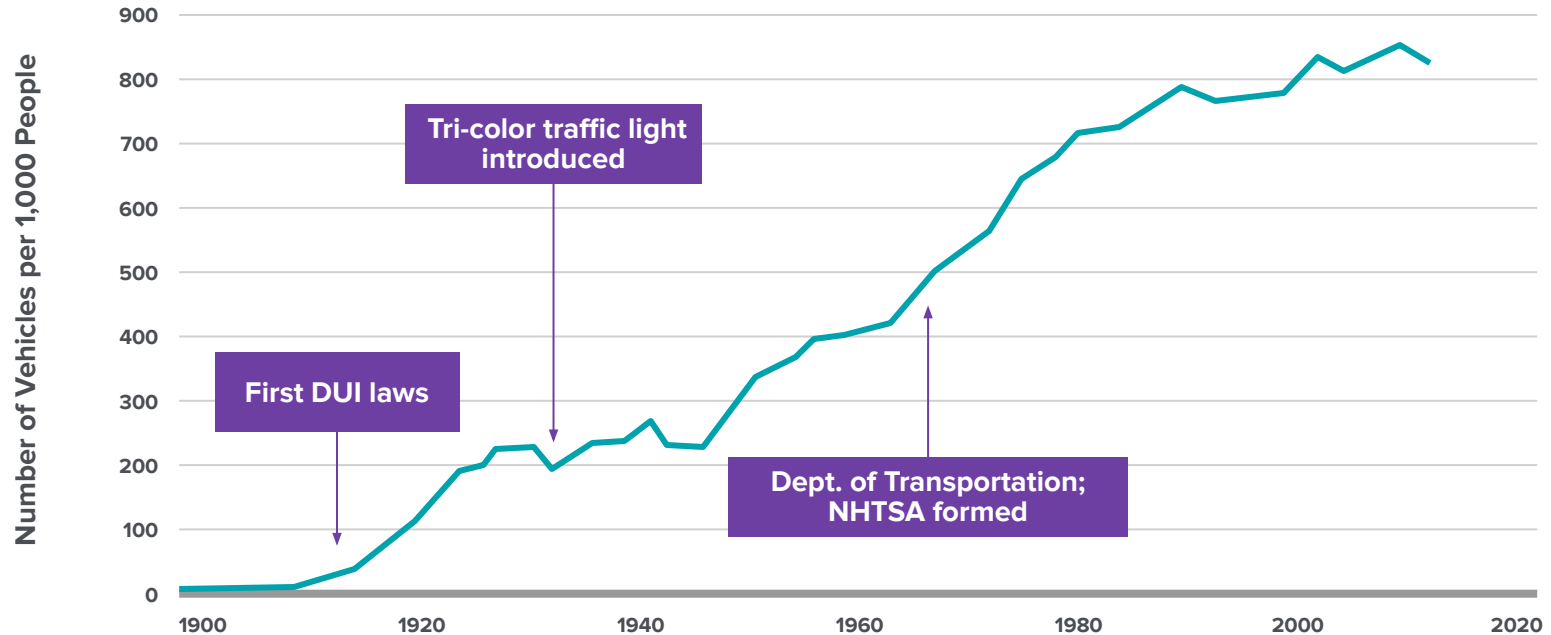
Protocol Labs

World Passenger Traffic Evolution: 1945-2018



Source: [World Economic Forum](#)

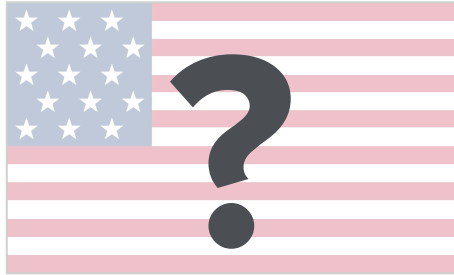
Vehicles per 1,000 People in the U.S.: 1900-2013



Source: [Mercatus](#)

Countries With Serious Digital Infrastructure Strategies

Establishing a strategy is the only way to secure our role as a financial and technological leader



Source: [World Economic Forum \(2016\)](#); [World Economic Forum \(2020\)](#)

The background of the image is a light gray topographic map. It features various contour lines of different thicknesses and colors (light gray, medium gray, and dark gray) that represent elevation changes. The lines are irregular and organic, creating a complex, wavy pattern across the entire frame. The text is centered in the middle of the image.

**andreessen.
horowitz**

Appendix: Case Studies

Building tomorrow's infrastructure & economy



The People's Network

Digital infrastructure



San Jose, 'Capital of Silicon Valley,' Wants to Fund Internet for Low-Income Households With Crypto Tokens

The money would come from coins mined on the Helium network.



The Permaweb

Digital infrastructure



REUTERS

TOP NEWS JUNE 23, 2021 / 11:31 PM / UPDATED 3 MONTHS AGO

Hong Kong's Apple Daily to live on in blockchain, free of censors

Fearing the security law could bring elements of China's great firewall to Hong Kong, limiting access to dissenting views, 21-year-old Ho - who works in tech and did not give his first name because of the sensitivity of the matter - began this week to upload Apple Daily articles on decentralised file storage platform ARWeave.



arweave

Play-to-Earn

Economic opportunity

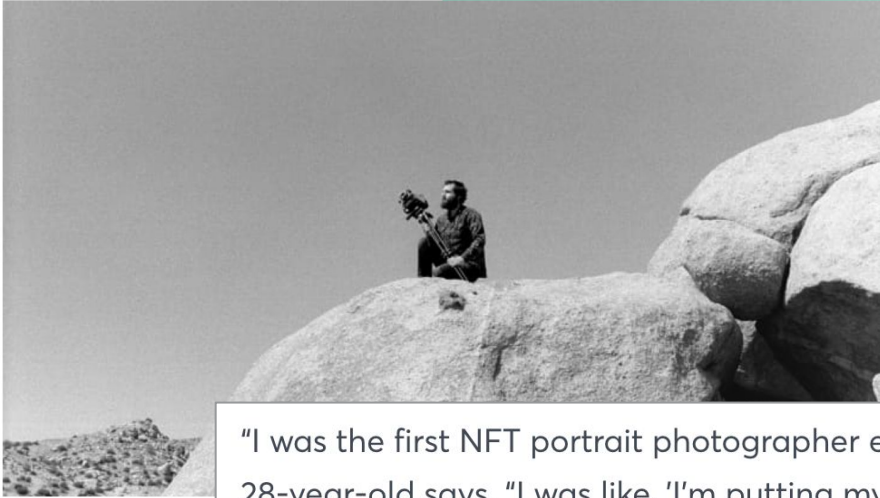


Source: [YouTube](#)

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The Creator Economy

Economic opportunity



"I was the first NFT portrait photographer ever on the blockchain," the 28-year-old says. "I was like, 'I'm putting my art on the blockchain because this is a tool,' since it allows artists to tokenize, own and profit from their pieces. "Why wouldn't any artists want to be on this?" Aversano asks.



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